



CAPITAL REGION
WATER

Susquehanna River Source Water

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History of Susquehanna River as a Drinking Water Source

- 1841 – Front Street Pump Station “Harrisburg Water Works”
 - 1905 – City Island Filtration Plant (1936 Flood)
 - 1942 – DeHart Dam, supplemented with River until 1948
 - 1965 – 1966 Drought, supplemented with River 1.5 years
 - 1994 – Dr. Robert E. Young Water Services Center
- DeHart Dam Primary Source | Susquehanna River Alternate Source

Most Recent Susquehanna River Source Treatment

- Dauphin Narrows PennDOT Project
 - May 1999 – February 2000
 - Results
 - Safe Drinking Water – No Violations
 - River Intake Icing Issues



Alternate Source Exercise - Fall 2017

Planned 10-Day Treatment Period

- Emergency Preparedness - Capital Region Water Customers
 - *“By failing to prepare you are preparing to fail.”, Benjamin Franklin*
 - Demonstrate confidence in treating alternate source/
2016 Emergency Mountain Line Repair
- Compliance – PADEP Recommendations
 - Emergency Response Plan
 - Filter Plant Performance Evaluation
 - Drought Contingency Plan
 - Water Allocation Permit
 - Preparation for Upcoming Regulations – *“Use it or Lose it”*



Alternate Source Exercise - Fall 2017, cont.

Planned 10-Day Treatment Period

- Infrastructure Reliability - Mountain Line Repairs
 - One valve replacement
 - One valve repair (leak)
 - One leak repair
 - 42" Valve Exercising
 - Dewatering is required
 - Blending sources is a future option



Timing of Fall 2017 Exercise

- Tentative 2016 exercise postponed
 - Mountain Line Condition Assessment Project, drought year, elevated river bacteria levels, equipment upgrades, SOP improvements
- October 2017
 - Minimize Customer Impacts
 - Cooler temperatures reduce taste and odor observations
 - Not during freezing temperatures to avoid icing issues
 - Customer preference



Timing of Fall 2017 Exercise, cont.

- **October 2017, cont.**
 - Gap in Capital Projects
 - After Upper Reservoir Repairs, Before Plate Settlers and Generator
 - Right-of-Way Conditions
 - After summer growth, before hunting seasons

Operational Impacts

- **Operator Experience**
 - Treatment adjustments filtration, chlorination, and corrosion control
 - Most operators did not experience the 1996 or 1999 exercise
- **Equipment Exercising**
 - Upgrades and Improvements have been tested short term
- **Cost**
 - Electricity - \$150 / Day
 - Chemical and Process Water – minimal increases

Water Quality Impacts

- **Safe Drinking Water - Primary Standards**
 - Treatment changes to meet and exceed all water quality requirements
 - No violations
- **Taste & Odor – Secondary Standards**
 - No change for most customers
 - Difference in taste and odor for some customers
- **Water Quality Testing**
 - Routine Regulatory Testing
 - Additional Quality Control / Water Plant and Distribution System



Questions?

